

## **5-STEP PROCESS FOR DEVELOPMENT OF NASA PREFERRED TECHNICAL STANDARDS**

<i><b>Stage 0</b></i>	<i><b>Stage 1</b></i>	<i><b>Stage 2</b></i>	<i><b>Stage 3</b></i>	<i><b>Stage 4</b></i>	<i><b>Stage 5</b></i>
<b>Proposal and Justifications to ESSC Members</b>	<b>Proposal Approval and Lead, Topic Working Group (TWG) Chair Assignment</b>	<b>Mini-Working Group Development</b>	<b>Full Center Review of Draft Standard</b>	<b>EMC Final Review, Conflict Resolution</b>	<b>NASA Chief Engineer Approval, Document Released</b>
<ul style="list-style-type: none"> <li>• Scope</li> <li>• Documents to be Replaced</li> <li>• Need, Benefits</li> <li>• Existing Standards</li> <li>• Non-Government Options</li> <li>• Available Expertise</li> <li>• Export Control Review</li> </ul>	<ul style="list-style-type: none"> <li>• ESSC Review and Recommendations</li> <li>• EMC Notified (Two Weeks)</li> <li>• Lead Center Assigned</li> <li>• Center Interest Solicited (Center Option)</li> <li>• TWG Chair Named and Preliminary "P" Document Number Assigned</li> <li>• Office of Primary Responsibility (OPR) Identified</li> <li>• ESSC Provided Status</li> </ul>	<ul style="list-style-type: none"> <li>• TWG Assigned</li> <li>• Schedule Set</li> <li>• Working Draft Developed</li> <li>• Informal Review Solicited</li> <li>• Working Draft Updated</li> <li>• Resolution Matrix Developed and Issued</li> <li>• To ESSC</li> </ul>	<ul style="list-style-type: none"> <li>• Export Control Review</li> <li>• Draft to ESSC Chair to Get Full Center Review (Including Programs)</li> <li>• ESSC Comments/ Concurrences to TWG</li> <li>• TWG Draft Modifications</li> <li>• Editing</li> <li>• Matrix</li> </ul>	<ul style="list-style-type: none"> <li>• ESSC and TWG Chair Present to EMC</li> <li>• Issues Resolved by EMC and Chief Engineer</li> <li>• Resolution to TWG for Final Adjustments</li> <li>• Editing, Final Number Assigned</li> <li>• Center Approval by EMC Members</li> </ul>	<ul style="list-style-type: none"> <li>• Chief Engineer Final Review/ Sign-off</li> <li>• Document Released as NASA Engineering Standard</li> <li>• Document Printed by MSFC</li> <li>• OPR Provides Distribution, Maintenance of Standard</li> </ul>

## **5-STEP PROCESS FOR DEVELOPMENT OF VOLUNTARY CONSENSUS (VCS) STANDARDS**

<b><i>Stage 0</i></b>	<b><i>Stage 1</i></b>	<b><i>Stage 2</i></b>	<b><i>Stage 3</i></b>	<b><i>Stage 4</i></b>	<b><i>Stage 5</i></b>
<b>Proposal and Justifications to ESSC Members</b>	<b>Proposal Approval and Lead, MTWG Chair Assignment</b>	<b>Mini-Topic Working Group Development</b>	<b>Full Center Review of Draft Standard</b>	<b>EMC Final Review, Conflict Resolution</b>	<b>NASA Chief Engineer Approval, List Release</b>
<ul style="list-style-type: none"> <li>• Scope</li> <li>• Documents to be Replaced</li> <li>• Need, Benefits</li> <li>• Existing Specifications, Standards</li> <li>• VCS Options</li> <li>• Available Expertise (Centers)</li> </ul>	<ul style="list-style-type: none"> <li>• ESSC Review and Recommendations</li> <li>• EMC Notified (Two Weeks)</li> <li>• Lead Center Assigned</li> <li>• Center Interest Solicited (Center Option)</li> <li>• MTWG Chair Named and Preliminary “P” Document Number Assigned</li> <li>• OPR Identified</li> <li>• Status Provided to ESSC</li> </ul>	<ul style="list-style-type: none"> <li>• MTWG Assigned</li> <li>• Schedule Set</li> <li>• Working Draft Developed</li> <li>• Informal Review Solicited</li> <li>• Working Draft Updated</li> <li>• Resolution Matrix Developed and Issued</li> <li>• To ESSC</li> </ul>	<ul style="list-style-type: none"> <li>• Mature Society Draft Available. Draft to ESSC Chair, to Get Full Center Review (Including Programs)</li> <li>• ESSC Comments/ Concurrences to MTWG</li> <li>• MTWG Draft Suggested Modifications for NASA Points of Interest</li> <li>• Society Draft</li> </ul>	<ul style="list-style-type: none"> <li>• ESSC and MTWG Chair Present Draft and Issues to EMC</li> <li>• Center Approve or Reject Position by EMC Members</li> <li>• “Accept” Issues Resolved by EMC and Chief Engineer</li> <li>• Society Response and Final Draft</li> </ul>	<ul style="list-style-type: none"> <li>• Chief Engineer Final Review</li> <li>• Chief Engineer Agreement and Volume List Issuance</li> <li>• Document Adopted as NASA Preferred Standard</li> <li>• OPR Cognizance</li> </ul>

## **5-STEP PROCESS FOR ADOPTION OF EXISTING VOLUNTARY CONSENSUS (VCS) STANDARDS**

<b><i>Stage 0</i></b>	<b><i>Stage 1</i></b>	<b><i>Stage 2</i></b>	<b><i>Stage 3</i></b>	<b><i>Stage 4</i></b>	<b><i>Stage 5</i></b>
<b>Proposal and Justifications to ESSC Members</b>	<b>Proposal Approval and Lead Assignment</b>	<b>Interest Working Group</b>	<b>Full Center Review of Draft Standard</b>	<b>EMC Final Review, Conflict Resolution</b>	<b>NASA Chief Engineer Approval, List Release</b>
<ul style="list-style-type: none"> <li>• Scope</li> <li>• Documents to be Replaced</li> <li>• Existing Specifications, Standards</li> <li>• VCS Options</li> </ul>	<ul style="list-style-type: none"> <li>• ESSC Review and Recommendations as Candidate for Adoption (Cursory Review)</li> <li>• EMC Notified (Two Weeks)</li> <li>• Lead Center Assigned</li> <li>• Identify Candidate Lead and Office of Primary Responsibility (OPR)</li> <li>• ESSC Provided Status</li> </ul>	<ul style="list-style-type: none"> <li>• Lead Forms Interest Working Group</li> <li>• Informal Review Solicited</li> <li>• Issues (if any) Identified</li> <li>• Resolution Matrix Developed/Issued</li> <li>• To ESSC and EMC Members with Matrix and Status</li> </ul>	<ul style="list-style-type: none"> <li>• Draft to ESSC Chair to Get Full Center Review (Including Programs)</li> <li>• Accept or Reject Position by ESSC Members of Interested Centers (Majority Rules)</li> <li>• ESSC Member Report to Respective EMC Member Center Approvals</li> <li>• ESSC Record Non-Concurrence</li> </ul>	<ul style="list-style-type: none"> <li>• Lead and ESSC Chair Present to EMC</li> <li>• EMC Final Approval or Disapproval</li> </ul>	<ul style="list-style-type: none"> <li>• Chief Engineer Final Review/ Concurrence for Use as “Adopted” NASA Preferred Standard</li> <li>• Document Adopted as Preferred NASA Technical Standard</li> <li>• List Issued</li> <li>• OPR Cognizance</li> </ul>

### **3-STEP PROCESS FOR ADOPTION OF ACQUISITION STANDARDS**

<b><i>Stage 1</i></b>	<b><i>Stage 2</i></b>	<b><i>Stage 3</i></b>
<b>Submittal of Proposed Acquisition Standards</b>	<b>Proposal Approval and Lead Assignment</b>	<b>ESSC Approval, EMC Approval, Chief Engineer (C.E.) Approval</b>
<ul style="list-style-type: none"><li>• Intent</li><li>• Known NASA Users</li><li>• Copy of Standard</li><li>• Similar Standard by other Organizations</li></ul>	<ul style="list-style-type: none"><li>• ESSC Members Prescreen and Recommend as Candidates for Adoption</li><li>• Identify Candidate Office of Primary Responsibility (OPR)</li><li>• Solicit Interest/ Comments from Centers/Discipline Working Groups</li><li>• Consensus Recommendations (Majority Rules)</li></ul>	<ul style="list-style-type: none"><li>• ESSC Review and Recommendations</li><li>• EMC Review and Recommendations</li><li>• C.E. Review; Acceptance or Rejection</li></ul>